

In the claims

1. [Original] A method of handling oversubscribed ports between switches, the method comprising:
detecting an oversubscribed port at a detecting switch;
selecting a set of paths exiting at the oversubscribed port for retagging;
invalidating tags for the set of paths;
receiving packets with the invalidated tags; and
retagging the received packets with a tag associated with a detour path.
2. [Original] The method of claim 1 further comprising determining the detour path from the detecting switch to a destination switch for the set of paths.
3. [Original] The method of claim 1 further comprising informing an owner switch of the set of paths that the paths are to be retagged by the detecting switch.
4. [Original] The method of claim 3, wherein more than one owner switch is so informed.
5. [Original] The method of claim 3 further comprising the owner switch moving at least some MAC addresses associated with the set of paths.
6. [Original] The method of claim 5, wherein the owner switch moves all MAC addresses associated with the set of paths.
7. [Original] The method of claim 1, wherein the detecting switch is different from an owner switch of the set of paths.
8. [Original] The method of claim 1, wherein the detecting switch comprises a same switch as an owner switch of the set of paths.
9. [Original] The method of claim 1, wherein the set of paths includes at least one path.

10. [Original] The method of claim 1, wherein the switches are part of a switching mesh.
11. [Original] The method of claim 1, wherein a tag for a path comprises an owner switch identifier, a destination switch identifier, and a path identifier.
12. [Currently Amended] A packet switch apparatus with oversubscribed port handling capability for use in a switching mesh, the apparatus including:
a plurality of ports; and
a switch controller coupled to the plurality of ports,
wherein the switch controller is configured ~~using procedures stored in memory~~ to (a) detect an oversubscribed port, (b) select a set of paths exiting at the oversubscribed port for retagging, (c) invalidate tags for the set of paths, (d) receive packets with the invalidated tags, and (e) retag the received packets with a tag associated with a detour path.
13. [Original] The apparatus of claim 12 wherein the switch controller is further configured to determine the detour path from the detecting switch to a destination switch for the set of paths.
14. [Original] The apparatus of claim 12 wherein the switch controller is further configured to inform an owner switch of the set of paths that the paths are to be retagged by the detecting switch.
15. [Original] The apparatus of claim 12, wherein a tag for a path comprises an owner switch identifier, a destination switch identifier, and a path identifier.
16. [Currently Amended] A switching mesh including a capability to handle oversubscribed ports between switches, wherein ~~each switch in the mesh is a~~ plurality of switches in the mesh are individually configured to detect an oversubscribed port, select a set of paths exiting at the oversubscribed port for retagging, invalidate tags for the set of paths, receive packets with the invalidated tags, and retag the received packets with a tag associated with a detour path.

17. [Original] The switching mesh of claim 16, wherein a switch detecting an oversubscribed port is configured to determine a number of path tags associated with the oversubscribed port and to operate in at least two modes depending on the number of associated path tags.
18. [Original] The switching mesh of claim 17, wherein if the number of associated path tags is larger than a threshold, then a first mode is used where some of the associated path tags are retagged by the detecting switch to a detour path tag, and the owner switch(es) of those retagged paths are informed that those paths are no longer being used.
19. [Original] The switching mesh of claim 18, wherein if the number of associated path tags is smaller than a threshold, then a second mode is used without retagging by the detecting switch.
20. [Original] The switching mesh of claim 19, wherein in the second mode, a set of at least one path tag is chosen, and the owner switch(es) of the chosen tags is (are) informed of the oversubscribed port.
21. [Original] The switching mesh of claim 20, wherein an informed owner switch reassigns at least one MAC address associated with the chosen tag(s) to another, less costly path tag.
22. [New] The apparatus of claim 12, wherein the paths of the selected set of paths and the detour path individually comprise a path between an originating source switch and an end destination switch of the packets and which includes a plurality of different switches intermediate the source and destination switches.
23. [New] The apparatus of claim 22, wherein the detour path defines an order of the switches of the detour path to communicate the packets after the retagging and which is different than orders of the switches of respective ones of the selected set of paths to communicate the packets.

24. [New] The apparatus of claim 12, wherein the invalidated tags and the tags associated with the detour comprise paths assigned to respective ones of the packets and which paths individually comprise a path between an originating source switch and an end destination switch of the packets and which includes a plurality of different switches intermediate the source and destination switches.
25. [New] The apparatus of claim 24, wherein the invalidated tags and the tags associated with the detour individually comprise a source switch identifier which identifies the originating source switch of the respective packet of the individual tag and a destination switch identifier which identifies the end destination switch of the respective packet of the individual tag.
26. [New] The apparatus of claim 12, wherein the tags associated with the detour remain associated with the received packets after the retagging and during subsequent communications of the received packets to an end destination switch by plural switches of the detour path.
27. [New] The apparatus of claim 12, wherein tags of other packets, received by the packet switch apparatus during the retagging of the received packets with the tag associated with the detour path, are not retagged by the switch controller.